

University of St. Thomas, Minnesota

UST Research Online

English Master's Essays

English

Spring 2019

The Future of Blended Learning: My Foray onto Twitch

Devan Tozzo

Follow this and additional works at: https://ir.stthomas.edu/cas_engl_mat



Part of the [English Language and Literature Commons](#)

Recommended Citation

Tozzo, Devan, "The Future of Blended Learning: My Foray onto Twitch" (2019). *English Master's Essays*. 35.

https://ir.stthomas.edu/cas_engl_mat/35

This Essay is brought to you for free and open access by the English at UST Research Online. It has been accepted for inclusion in English Master's Essays by an authorized administrator of UST Research Online. For more information, please contact libroadmin@stthomas.edu.

The Future of Blended Learning: My Foray onto Twitch

by

Devan Tozzo

A master's essay submitted to the faculty of the
Graduate Program in English in the partial fulfillment
of the requirements for the degree

Master of Arts in English

University of St. Thomas
Saint Paul, Minnesota

May 2019

Abstract

The dawn of the Digital Age has and will continue to change how we approach education. With the widespread availability of new tools and resources at our disposal, it is time to begin exploring these new digital frontiers through the lens of writing studies. Unlike former studies which primarily focused on incorporating text-based social media, this study incorporates Twitch and Discord into a weekly student-lead study group. This study group was developed with the intention to fill a much-needed hole in Twitch's platform: education. After reviewing attendance and participation statistics, results suggest that if appropriately structured, Twitch and Discord are viable options to increase self-directed learning. Moreover, as Twitch is a public platform, it would cast a wider demographic net than simply those physically in the classroom. Results showed participants sharing their works, tutoring one another, and using the practices role-modelled during Study Group streams in their own communities. Limitations discovered include lack of internet access, digital illiteracy, lack of real face-to-face interaction, and insufficient incentives.

A Bit Of History

Since the 1990s, internet has become an integral part of the learning process. Not only has it globalized sharing of information, but it forced teachers and students to reconceptualize their definition of a learning space. No longer was learning confined to a classroom. No longer were teachers bound by physical constraints. For hundreds of years, students have largely been taught in the same format, in the same spaces, even in the same chairs and desks as their parents. Enter the Digital Age, teachers have a new arsenal of tools to make learning more than what can be read in a physical textbook or off a chalkboard.

Even by the 1980s, computers were becoming a common feature in schools. Not only did the internet provide new forms of information integration, but the computers themselves created new learning spaces in the form of software and programs. Games were created for elementary level students combining car racing and solving math equations. Ecology lessons were taught as the user played a small fish in the Great Barrier Reef, forced to survive and

evolve by eating other, smaller fish and plants.¹ Teachers and students were given their own laptops as personal computer companies like Macintosh were partnering with schools to bring their products into the classroom.² Technology and education were intertwined, forcing innovation in the pedagogical world.

With cultural and societal shifts, theoretical changes must occur. Pedagogical theorists rethought their practices in order to remain relevant. For instance, rather than a traditional classroom, game-based learning (GBL)³ classrooms are transitioning their long-term goals to focus on higher-order thinking skills.⁴ These digital learning spaces have the advantage over the traditional classroom as they are dynamic, malleable, and give agency to their participants. Moreover, according to Dan White, the co-founder and CEO of Filament games, “games encourage a growth mindset.”⁵ Rather than students writing off their learning progress under pretenses like they’re “no good at math” or “can’t write well,” placing them in a game-setting allows them to push themselves *for themselves* rather than for a grade or any other exterior pressures. Gaming increases the agency of the interior self and therefore creates a space

¹ This is in reference to *Odell Down Under*, a game released in 1994 and developed by Minnesota Educational Computing Consortium. For more information, visit *Odell Down Under* at MobyGames.com.

² Stephen Silver, and Mike Wuerthele, "Apple and Education: Four Decades of Highs and Lows." *Apple Insider*. March 26, 2018. Accessed January 5, 2019. <https://appleinsider.com/articles/18/03/26/apple-and-education-four-decades-of-highs-and-lows>.

³ Game-based learning is the result of a modernizing curriculum. Students set goals, make decisions in order to achieve said goals, and then deal with the consequences of those actions. The key focus is to try, fail, and try again. This encourages active rather than passive learning to occur.

⁴ Higher-order thinking includes skills like critical thinking, collaboration, problem solving, and communication. Lower order thinking skills would be more general: remembering information, understanding why it’s important, then applying that information to real-world situations.

⁵ Kelli Anderson, "Game-Based Learning Is Changing How We Teach. Here's Why." *EdSurge*. February 14, 2019. Accessed March 31, 2019. <https://www.edsurge.com/news/2019-02-04-game-based-learning-is-changing-how-we-teach-here-s-why>.

focused on teaching the individual for the sake *of the whole* rather than teaching the whole for the sake *of the individual*. This concept is better known as **self-directed learning**.

Self-Directed Learning in Writing Studies

With this in mind, I applied these ideas to writing studies. How can we shape writing studies to better fit the needs of digital dynamism? Writing studies, in their truest form, are already a lobby for contention. There is no one true way to teach a person how to write or speak their language most effectively. In 2016, Linda Adler-Kassner and Elizabeth Wardle released a compilation of threshold concepts of writing studies.⁶ As a prologue to this text, Adler-Kassner forewarns critics that the following concepts were just that: *concepts*, meant to be challenged, expanded upon, and questioned. However, the following threshold concepts were also provided by those who had the experience required to provide basis to these claims. Many of the individuals providing the concepts were teachers, professors, scholars, and pedagogical theorists. Regardless, these Threshold Concepts would be the foundation of my experiment. I needed writing studies models that were malleable, not specifically right or wrong. I needed to start from a foundation that was a dynamic as my focus.

First and foremost, Kevin Roozen, professor at the University of Central Florida, explains, “No matter how isolated a writer may seem as she sits at her computer, types on the touchpad of her smartphone, or makes notes on a legal pad, she is always drawing upon the

⁶ These Threshold Concepts span anywhere from “Concept 2.4 All Writing Is Multimodal” by Cheryl E. Ball and Colin Charlton, to “Concept 4.2 Failure Can Be An Important Part of Writing Development” by Collin Brooke and Allison Carr.

ideas and experiences of countless others.”⁷ The idea of writing as a social act stood out to me as the socialization feature acted as a path to higher-order thinking skills. Collaboration and communication are my primary focus as, until now, most individuals would think of writing as a solitary act.⁸ Within the literal act of writing there was no hint of conversation unless through the act of exchanging writing with another person. This is where I could introduce the idea of thinking critically. If someone were to approach writing as a social act, how would they accomplish this task? Even more specifically, how would someone accomplish this task using the technological tools of the Digital Age? How could I take the ideas of GBL and apply it to a dynamic, social-interaction based classroom?

To answer these questions, I approached the classroom from a non-physical space, using a basic online approach. I then needed to find software that would support my experiment while also remaining cost-effective. At this point I integrated Twitch.tv (TTV), a “popular online service for watching and streaming digital video broadcasts.”⁹¹⁰ Loosely defined, streaming is the constant, smooth transference of data from computer to computer; within the context of Twitch, the data is in video format. The original use of the platform was for individuals to stream live video of them playing video games and interacting with a live text-

⁷ Kevin Roozen, “Writing Is a Social and Rhetorical Activity,” in *Naming What We Know: Threshold Concepts of Writing Studies*, ed. Linda Adler-Kassner and Elizabeth Wardle, (Louisville: University Press of Colorado, 2005), 17–19.

⁸ When most writing happened, it was happening as one wrote in their journal, composed a private letter, or typed out a work e-mail while sitting at a desk.

⁹ Twitch is the streaming platform I decided to use for this project. There are other live-streaming platforms out there (i.e. YouTube and Mixer), but as I had already been using Twitch for some time I decided to stick with their services. In order to sign up for a TTV account, you must be 13 years or older.

¹⁰ Brad Stephenson, “Twitch: Everything You Need to Know,” in *Lifewire*. Accessed December 17, 2018. www.lifewire.com/what-is-twitch-4143337.

chat audience. Viewers would type, hit “Enter”, and their text would pop up next to their username for the “streamer” to read and respond to.¹¹

As of March 2019, TTV hosts nearly 140 million active users, 15 million of which open and use the app/website daily.¹² The platform was already home to millions of people, all interested in playing/watching/experiencing video games. This was the home to my primary audience and therefore, I came to a similar conclusion as the education community in the interview with White: “This platform really resonates with the people [I’m] trying to reach. So why don’t [I] try to use it as a vehicle to reach them?” Twitch would give me access to my target audience: individuals who were looking to learn in an environment focused on community interaction, as well as unique, live, and self-motivated entertainment. Moreover, I sought to give agency back to the learners and, as one of Twitch’s core objectives, “With chat built into every stream, you don’t just watch on Twitch, you’re a part of the show.”¹³ My primary focus and audience aligned with that of Twitch’s and therefore I would create a study group space within the confines of the platform.

¹¹ This method of entertainment eventually reached and succeeded the popularity of televised sporting events, streaming live to viewer counts in the millions. (In 2017 the game *League of Legends* World Championship Finals reached 60 million viewers.) Despite its origins in video game streaming, Twitch has further expanded its range of genres to categories such as “Cooking”, “Just Chatting”, “Music & Performing Arts”, “Art”, and even “ASMR” (Autonomous Sensory Meridian Response, also known as weird, soft noises that give people the tingles).

¹² Craig Smith, “55 Amazing Twitch Stats and Facts (2019) | By The Numbers.” DMR. March 29, 2019. Accessed March 30, 2019. <https://expandedramblings.com/index.php/twitch-stats/>.

¹³ “About.” Twitch.tv. Accessed March 31, 2019. <https://www.twitch.tv/p/about/>.

Establishing Process Based On Practice

As I already had some base knowledge of Twitch and its available components, I was easily able to establish a virtual platform to start from. I created an account unique to this experiment and was able to draw from my previous connections to garner interest within the Twitch community. However, I did not have any predesigned notions for how an experiment like this was going to evolve. As of the time of this publication, there was little to no research done on the topic of using Twitch as a method of education; however, I did find several articles of other like-minded individuals who had turned to alternative digital methods as tools in the classroom.

In its most basic form, my Study Group stream was formatted as such:

- 1.) A large live stream video of what was happening on my computer screen
(sometimes I would stream me writing blog posts, sometimes I'd stream me creating infographics on Photoshop).
- 2.) In a smaller box in the lower left of the screen was a live video stream of me, a video camera was pointed directly at my face so viewers could see my reactions to comments, etc.
- 3.) Music played in the background for ambiance.
- 4.) Occasionally practiced different study techniques.¹⁴

¹⁴ Techniques such as the Pomodoro technique. We set a timer for 25 minutes and working solidly during that time, then taking a five-minute break before resetting the timer. We also practiced Peter Elbow's free writing techniques for ten minutes increments when I felt the SG was becoming stale.

- 5.) If anyone came into chat wanting to talk about homework or hold a discussion I would stop my work and redirect the stream's attention to the newcomer's requests.

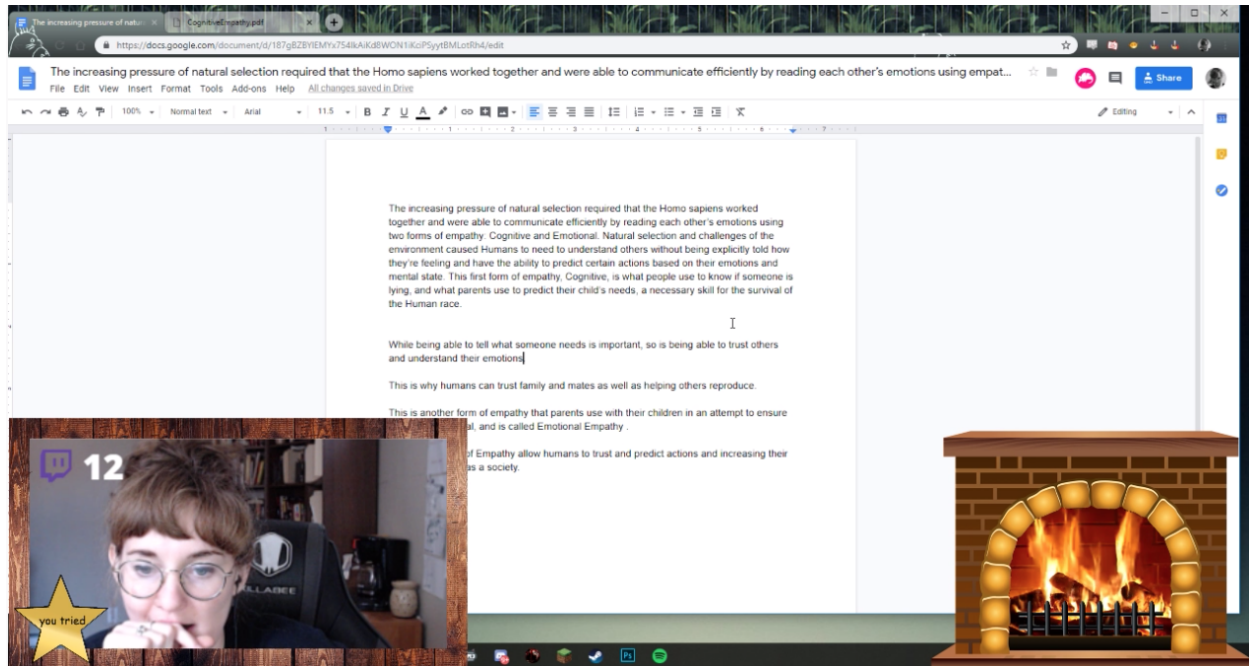


Figure 1: A screenshot from a Study Group stream. A viewer submitted a Biology essay for workshop. I posted it on a Google Doc which allowed for multiple users to edit and provide feedback simultaneously. The figure displays how the stream would look to the viewer.

This structure was successful for several reasons. It is important to note that I already had a trusted online presence which allowed users to come into my chat trusting they would get legitimate feedback and help. Moreover, the layer of anonymity provided by a usernames versus real names also played into the amount of participation. If things went wrong, there were no real-life consequences.

However, after my first study group session, I needed to set a more research-based structure. People were interested and I was bringing in individuals from the Twitch community that were intrigued by the idea of a space on Twitch centered around education. For this I

turned to Dominic Chawinga, a professor at Mzuzu University in Malawi. Chawinga's approach challenged the idea that social media is a "distractor to pedagogy" and instead used social media and technology to facilitate teaching and higher-level learning.¹⁵ This was accomplished through the use of Twitter and blogs over the time period of two higher education courses.

Chawinga uses social media as supplementary tools for blended learning. Through integration of Web 2.0 resources, Chawinga found that rather than hindering learning, the virtual avenues for learning actually improved students' educational experience.¹⁶ Through a strict set of guidelines, Chawinga was able to establish a functioning platform of which to communicate with his students. He had students create accounts and through these, communicate both in and out of class. Based on his data collection and interviews with students post-course completion, Chawinga concludes "students are not only ready and enthusiastic in using social media in the accomplishments of their educational activities. Rather, students are able to practically use these social media practically."¹⁷ It is important to note here that Chawinga incorporated two types of social media in his courses: blogs and Twitter (micro-blogging).¹⁸ The type of social media integrated *does* make a difference, as Twitter and the use of blogs was already a well-understood concept by the time his study was published.¹⁹

¹⁵ Dominic Chawinga, "Taking Social Media to a University Classroom: Teaching and Learning Using Twitter and Blogs." *International Journal of Educational Technology in Higher Education* 14, no. 3 (January 25, 2017).

¹⁶ Web 2.0, a term coined by Darcy DiNucci in 1999, refers to websites that emphasize user generated content, ease of use, and require high levels of user participation in order to function. Social-networking websites like Facebook or Twitter are the direct result of Web 2.0.

¹⁷ Chawinga, "Taking", 17.

¹⁸ Micro-blogging is a form of blogging that has a limited number of characters. Rather than the larger file size of standard blogging (usually anywhere from 300-1000 words per post), microblogging can be limited to certain file size. The most common forms of micro-blogging include Twitter posts (140 character limit), text messages, e-mails, digital videos, etc.

¹⁹ Chawinga's study was published in 2017, 11 years after the founding and mainstreaming of Twitter in 2006.

In a previous study, Thomas Menkhoff et al. establishes a foundation for the use of micro-blogging and social networking in the classroom.²⁰ Despite the limited representative studies about using social media (specifically Twitter) in higher education, Menkhoff et al. extrapolates that the “communication benefits of microblogging which enables learners to share and seek information as well as nurturing relationships with their peers” empower learners and increase habits of self-directed learning.²¹ Specifically focusing on Gen Y students (i.e. students who are more technologically savvy), Menkhoff et al. seeks to create a space where students feel encouraged to openly communicate both with each other and the instructor. This was emphasized through the projection of live tweets during lectures so the class could see their own responses, as well as the responses of their peers. In turn, the professor would integrate responses to tweeted questions, comments, or concerns into the lecture.²² This increased both participation and agency, as students would see their interaction as guiding the lecture toward their greatest intellectual needs. In this way, Menkhoff created both a virtual and physical discourse, and by definition, a blended learning experience.

What both of these studies show is through blogging and microblogging, through committed integration of these technologies in the class’s curriculum, both students and instructor’s alike showed enthusiasm for class focused around a digital learning experience. In addition to increasing student participation and interaction, social media can also be used as a

²⁰ Thomas Menkhoff et al. "Incorporating Microblogging (“tweeting”) in Higher Education: Lessons Learnt in a Knowledge Management Course." *Computers In Human Behavior* 51 (December 16, 2014): 1295-1302. www.elsevier.com/locate/comphumbeh.

²¹ Menkhoff et al., “Computers”, 1296.

²² Ibid., 1299.

platform for reflection and feedback. In both studies, students were recorded not only interacting with the instructor, but engaging in peer teaching practices simultaneously. Christine Rosalia studies how students can use metacognitive strategies through a social media dialogue.²³ However, rather than using Twitter, Rosalia used three different technology platforms: Moodle, Drupal, and Google Apps (each application designed for giving and receiving feedback on large written works).²⁴ These are not mainstream social-networking websites focused around the quick production of content limited to a number of characters. Google Apps, which, as of this study, has been upgraded to Google Drive,²⁵ is a large file storage and sharing device where users can upload documents from their home computer or mobile device and access them at a different location through Google Drive's live synchronization software.²⁶

Unlike Menkhoff's use of a projector to broadcast live Tweets, or Chawinga's use of microblogging as a line of 24/7 open communication, Rosalia uses social media as a platform for collaboration both in and out of the classroom. For instance, when a document is uploaded to Google Drive, more than one user can be accessing and editing it simultaneously. Therefore, a student could upload a document and be receiving digital feedback from multiple peers at the same time.

²³ Christine Rosalia, "So You Want to Start a Peer Online Writing Center?" *Studies in Self-Access Learning Journal* 4, no. 1 (March 2013): 17-42. <http://sisaljournal.org/archives/mar13/rosalia>.

²⁴ Rosalia, "Online Writing Center", 24.

²⁵ Google Drive is a free Cloud Storage Service run by Google. Through this service you can upload/download files from your PC to the internet and access them anywhere via web browser or the Google Drive app. As a general requirement, you must have a Google account and must be 13 years of age or older. Google Drive also gives you access to Google's own version of Microsoft Office which can be live-edited and accessed by multiple users at the same time including Google Docs, Sheets, PowerPoint, Forms, Jamboard, etc.

²⁶ You can upload documents from one location and get them immediately somewhere else.

Convenience aside, Rosalia brings to light the importance of shared decision-making and the accountability encouraged within these technological contexts. For instance, Rosalia's primary use of social media was for an online writing center where tutors would not only give feedback on submissions, but their feedback would then be further reviewed by their peers.²⁷ This co-construction of feedback was based on the layered collaboration of processes through the portals of three chosen pieces of software.

Despite the successful integration of technology in their classrooms, what each of the aforementioned studies touch on is the fact that face-to-face interaction was not only encouraged, but *necessary*. These practices are not meant to substitute in class interaction, but enrich it, creating a blended learning experience.²⁸ The main reason for the success of these studies was the digital literacy levels of the students and their willingness to participate in this type of learning environment. Menkhoff's study specifically focuses on the Gen Y demographic. Both Rosalia and Chawinga's studies were conducted with participants from the same generation (ignoring those students from age groups older than the average collegiate radius). Without the technical capabilities and base-knowledge the majority of the students already have, these studies would not be as effective.

Moreover, without the instructor's knowledge of the technology they're implementing, student's might also have a hard time grasping concepts. For example, a more skeptical student of Menkhoff's use of Twitter was quoted saying, "The instructor was not familiar with Twitter himself. Hence, I was not motivated to use it as I don't know how to use it myself. If my Prof

²⁷ Rosalia, "Online Writing Center", 27.

²⁸ Rosalia, "Online Writing Center", 32; Menkhoff et al., "Computers".

doesn't know how to use it and he wanted me to use it – that does not make sense.”²⁹

Furthermore, the student expresses their displeasure with being graded based on social media participation since they didn't fully understand how to use said form of social media. In these instances, instructor-student interaction is required. Not every student will grasp the technology and great care must be taken to ensure class-wide understanding of its use as well as purpose.

As a student from Menkhoff's study replied when asked “why [their university] should offer more courses with tweeting activities”: “University students like unconventional ways of learning.”³⁰ With that in mind, these new styles of both teaching and learning need substantial explanation. Many students are conditioned by the time they hit higher-education to expect the same classroom format, lecture style, and learning structure they experienced through their academic lives. Therefore, when introducing social media as a facet of the course, Chawinga notes “using them haphazardly should be avoided.”³¹ Students need to know *why* and *how* their instructor is planning to weave social media into their lessons.

Limitations

However, in order for the use of social media to be effective, certain limitations must be acknowledged. In short, social media is virtually impossible without internet access. Students in

²⁹ Menkhoff et al., “Computers”, 1299.

³⁰ Ibid., 1300.

³¹ Chawinga, “Taking”, 17.

Chawinga's study without mobile devices or laptops to participate were forced to use the university library's computers, limiting both versatility and availability.³²

Furthermore, a certain degree of digital literacy is a requirement. As Monkhoff's aforementioned student said, not everyone fully knows and understands the ins and outs of social media tools. Additionally, not all students will fully understand how to use their devices for a classroom setting, as a certain percentage of Menkhoff's study expressed their knowledge of their computers as "novice."³³ Dedicating a few class periods to a social media tutorial would be beneficial for these students in addition to checking back in with students who seem to be struggling with some of the more complicated features.

Moreover, these studies were conducted by students ages 18 and older, all at appropriate ages to create internet accounts. Many social media websites, Twitter and Twitch included, employ age restrictions for their users. Therefore, if these practices are to be used outside of these studies, the most appropriate demographic would be participants in institutions of higher education.

Creating Something From Nothing

When I first began the study group streams, I did not have a prescribed format or structure. I initially set the pace based on Peter Elbow's pedagogical theory: *Writing Without Teachers*, a book about teacherless classrooms and looking at writing and writing studies as a

³² Ibid., 9.

³³ Menkhoff et al., "Computers", 1297.

communal activity.³⁴ Unlike Rosalia, who's process involved heavy teacher-student interaction, Elbow argues that "learning is independent of teaching" and therefore students should carry the most weight when it comes to their educational experience. So long as there were some set parameters, students learned best from other students.³⁵

As I had no credentials related to teaching, the model of a teacherless writing class was the most applicable and could be interpreted to fit my needs. I wanted a Writing Center feel without the physical restraints of a Writing Center; however, since I was starting from scratch I left Study Group as an open-door-policy learning space.³⁶ My primary focus was role-modelling different techniques/styles of learning and basing these techniques off my interpretation of Adler-Kassner's Threshold Concepts.

Moreover, as I did not have a physical space to have those ever-important face-to-face interactions with participants, I used another application to imitate this design: Discord, a free voice and text chat application that allows me to create invite-only spaces to virtually gather.³⁷ As my target demographic already brought to the table a knowledge of the internet and how to use basic applications, I found Discord to be the most relevant and useful application to fulfill my needs.³⁸

³⁴ Peter Elbow, *Writing Without Teachers* (Oxford: Oxford University Press, 1998).

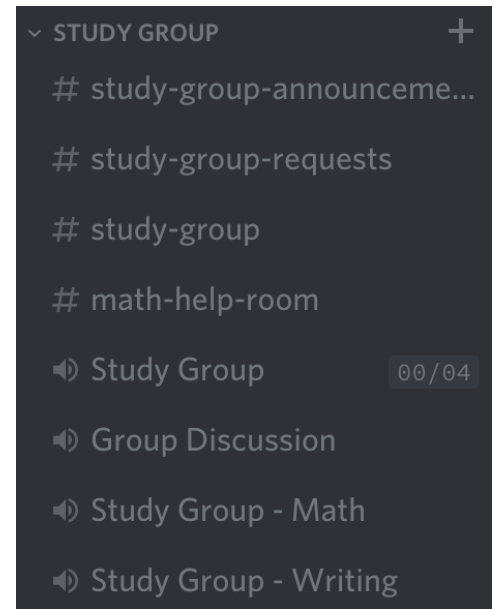
³⁵ A notion previously echoed by Chawinga, Rosalia, and Menkhoff: parameters are essential.

³⁶ Study group streams were later officially titled "Study Group Wednesday"

³⁷ Discord is a free text/voice/video chat application available accessible through a downloadable desktop app, mobile app, or directly through their website. Much like TTV, you must be 13 years or older to have your own account. Although its original intention was to create gaming communities, I have retro-fit it as a place of learning, sharing, and discussion in addition to a fun place to hang out and talk about gaming. Unlike other social media platforms, your Discord community is an invite-only space and can be heavily moderated through Privacy & Safety Settings.

³⁸ According to the company website, Discord has 6.2 million concurrent users as of the date of the publication of this essay.

Where Chawinga and Menkhoff used Twitter to communicate, I used Discord to post updates and announcements. Followers could join the Study Group Discord and be able to communicate directly with me or other followers outside of Twitch chat.³⁹ Not only is Discord far more accessible to users, but also is pivotal in the creation of a communal space and as Elbow says, working on your writing, or any other form of learning for that matter, should never have to be an alone activity.⁴⁰ The implementation of a communal space outside of the Twitch stream was an essential addition. There, followers shared images, files, videos, notes, apps, memes, creating a truly multimodal space. Moreover, I could create individual voice-chat rooms based around specific areas of study. In the Study Group Discord, sharing work was not only encouraged but quintessential to the space's success and will be discussed further later in this essay.



Covering Multiple Learning Styles

As the Study Group streams continued, I added features based on the requests of the participants. In my post-stream reflections, I would note down goals for the following streams and do the research required to achieve them. I already had a theoretical basis for this study,

³⁹ Discord was essential in these moments as the Twitch chat did not have a feature where the text-chat would be saved. Moreover, after a stream was finished most followers would exit the stream and cease any further discussion.

⁴⁰ Elbow, *Writing Without Teachers*, v.

but I needed to find more scholars who had put ideas like this into practice. This is when I discovered other like-minded individuals who were interested in the implantation in enriching the blended learning experience: Rosalia, Chawinga, and Menkhoff. Unlike their studies, my experiment had a more organic approach. Rather than having a set space or class of participants, I acquired mine over time through word-of-mouth. Moreover, I did not have a set of requirements of parameters for my participants as I was unsure of how many people would show up to streams and therefore developed them over time based on experience and viewer feedback.

As previously discussed, I wished to create a space that was open, diverse, and adhere to multiple learning styles simultaneously. I was using video as my primary source of communication, wherein cultivating visual learning was my primary objective. My second form of communication, sound, was adhering to aural learning requirements. Not only was I *showing* the processes of what we were doing, I was *narrating* it as well.⁴¹ My Twitch streams would consist of more than a talking head, as mentioned before, my shared screen was the primary visual experience. As Elbow makes clear, “schooling makes us obsessed with the ‘mistakes’ we make in writing,”⁴² and therefore my work, as well as any mistake I made, was projected for all to see.

For the more verbal learners, as in most cases with streamer-viewer communication, the majority of verbal exchanges are one-sided. This is why I created the study group voice chat

⁴¹ For the hearing impaired, I also used a special closed-captioning software. As CC software for streaming is still in its infancy at this time, the captions were not always accurate, but they did work for those who either could not hear what I was saying.

⁴² Elbow, *Writing Without Teachers*, 5.

spaces in the Discord. I had students opting into those voice chat spaces and teaching us how they did their algebra to study for their test the following day. A single mother came in and read a poem because she wanted to practice reading poetry in front of a crowd. In this fashion, I was also making a space for both social and solitary learners. If participants wanted to chat they could, but it was entirely voluntary. In this way, I was also giving the more solitary learners their own space to lurk and work alone with the stream on in the background for noise.⁴³

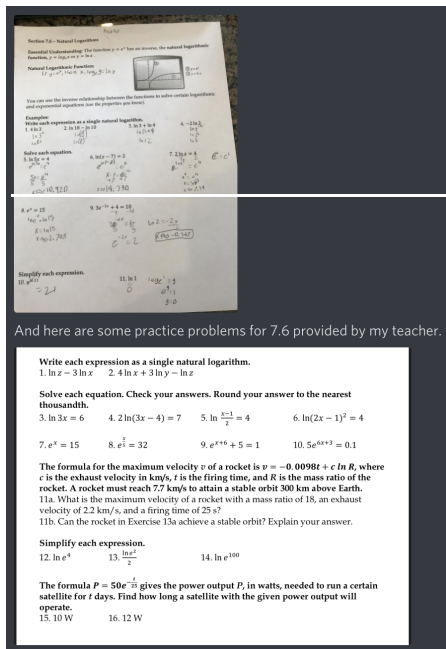
The two more difficult areas of learning I addressed were physical and logical. The stream space is stagnant. I sit in a chair and viewers sit where they are most comfortable. There is no way I can force any viewer to be physically active while they watch the stream and the majority of learning is done on a tactile level. However, if I reinterpret the idea, I could find a way to make the learning experience more *interactive*. I would specifically use types of software that were free, easy to access, and allowed for multiple users simultaneously. For example, for the math tutor groups, I had them use an online whiteboard they could draw on using their smartphone or through their personal computers. During a later Study Group, I had students from different age groups send their written work to me so I could share it on a Google Document for the stream to not only read, but leave comments as well. As we had been working on several workshops prior to this, it was another way to practice good workshopping

⁴³ When a viewer goes into “lurk-mode” they have the stream open on their device, but are not necessarily active in chat.

techniques. This way I circumvented a one-sided teaching technique and gave them the agency to learn on their own terms.

On that note, initially having an “open” study space, brought more viewers to the stream. I allowed them to come in to chat with any query and then I would work with them to find a solution.

For instance, I had viewers coming to streams needing math help (an area outside of my expertise). Due to this issue, I opened an application for volunteer tutors to come by during



And here are some practice problems for 7.6 provided by my teacher.

streams and help these particular viewers.⁴⁴ It seemed like math was the area that needed to most help, so I then set to looking for free software to integrate into the streams and that’s

where I found an online whiteboard, editable from both mobile and PC. This helped immensely, but I then had to approach the issue that my expertise was in English Studies and I had intended to lead the stream to a more workshop

focus rather than math focus.

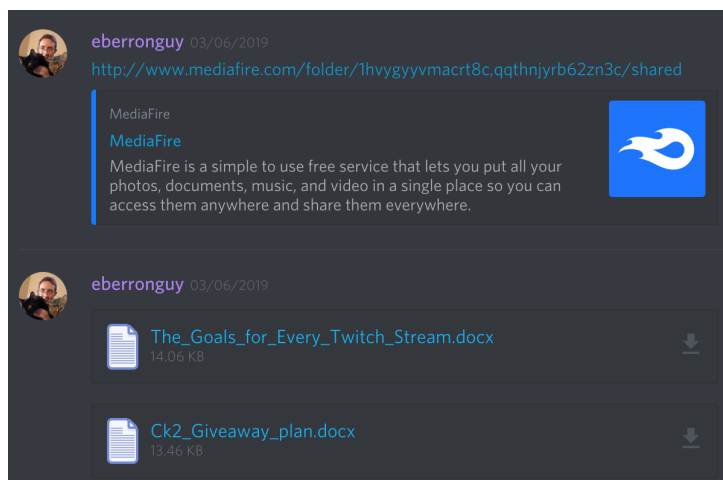
Multimodal Multitasking

In order to incorporate both areas of study I utilized Discord where I could create spaces for both disciplines. In this manner I was still able to host workshops on the live stream, while

⁴⁴ I created a Google Form for volunteers to sign up and tell me what subjects they felt comfortable to tutor. When these subjects arose on stream I could then contact them via Discord to ask for assistance.

viewers could also receive the math help they needed. The math tutor and the student would be able to talk via the voice chats and use the “math-help-room” chat area to exchange notes, formulas, or screenshots of workbooks, etc. These areas were also effective for exchanging files and written works.

These new avenues of information sharing dramatically increased productivity. We went from only one or two questions being resolved to



helping a student from the East Coast of the US with their sequential long division in one chat, to helping a woman in Australia practice reading her poetry aloud to a group of people simultaneously.

While those two tasks were happening, I was also able to open a Google Doc as some viewers had expressed a desire to write a story together.⁴⁵ Following the practices of both Chawinga and Rosalia, I established parameters for the activity that would focus on guidance rather than prescription. Moreover, as this activity was created to meet the needs of an extremely diverse authorship, I also emphasized Elbow’s points surrounding the fact that writing is for more individuals than *just students*.⁴⁶ There were viewers who were PhD recipients, viewers who were speaking English as a second language, viewers who were in their 40s and viewers who were in their teens. In order to create an activity applicable, fun, and

⁴⁵ This is referred to as a “Chain Story Activity” and rules and excerpts can be viewed in Appendix B.

⁴⁶ Elbow, *Writing Without Teachers*, vii.

challenging for every participant, I shaped the parameters not around adherence to a singular form of writing, but on communication in general.

My rules were first and foremost about writing as a means to have fun. Based on past interviews with the viewers, many of them viewed writing as boring, workshopping as scary, and writing studies as something they were forced to care about to do well in school. Moreover, there were also those who specifically voiced being unable to write and therefore refused to participate. For those viewers, I incorporated rules discouraging any form of judgment passed on other participants' styles/levels of writing. Not only would this help the more self-conscious writers express themselves more freely, creating a sort of web-based safe-space, but also it would encourage those same writers to not judge their own writing based on the writing of their cohorts. One participant, by the name of Sonicwave_, mentioned a previous workshop experience in school where his classmates were unable to give him feedback on his own writing due to the fact that they automatically compared their own writing to his. This sense of inferiority held these students back from feeling comfortable enough to participate in the activity. Consequently, the rule disallowing the passing of judgement about other's writing skill levels would aid in both of the aforementioned areas.

On the opposite side of spectrum, there were viewers who expressed frustration, they felt they were not being challenged enough. I wanted to make sure these students still felt challenged while also role-modelling how to work within certain constraints they might disagree with. They would still be writing alongside other participants with lower skill levels than themselves, but rather than this being a hindrance, I meant to turn it into something that would push them out of their comfort zones. For instance, there were several participants who

were excited to show off their writing skills. Each person would get one to two paragraphs to add to the story not only challenging the students with higher writing levels to make their paragraphs count, but also holding them back from running away with the story on their own.⁴⁷ This activity was meant to be a practice in collaborative writing, and therefore each writer would have to adapt to the plot of the paragraphs before.

So far I was challenging the more polished writers to quickly adapt and accept that writing was sometimes messy.⁴⁸ For the writers who needed a bit more help in polishing, I was providing them with space to push themselves if they chose and try to work through that initial fear of others reviewing their written work.

In addition to the rules designed to create an invited writing space, I also had several guidelines for the writing itself. There was a specific genre requirement, we decided on “Space Fantasy” as it was very open-ended, but also gave the writers a jumping-off point. I also incorporated language and content censors: mature language and content was allowed, to an extent.

As for the success of the activity, I ended up working similarly to the game “Telephone”. One of my more enthusiastic tutors got us started with some basic worldbuilding and then from that point forward each person added their own bit of unique flair.⁴⁹ There were writers who wrote in bizarre fonts, writers who primarily focused on dialogue, while others wrote more about the world around the characters. Some writing was well-formulated and thought out,

⁴⁷ However, if a participant found themselves on a tangent that would last longer than two paragraphs, I allowed them to extend their page allotment to three or four pages. In this way, their creativity would be encouraged rather than forced to strict constraints.

⁴⁸ Elbow in his *Writing Without Teachers* refers to this as “therapeutic garbage.”

⁴⁹ Each of the examples here can be found in Appendix B.

other writing was disjointed and utterly ridiculous in its scenes and actions. The combination of the multiple styles, levels, and intentions made the activity a perfect exercise in collaborative writing.

At the following stream, post-creation, I read through the story as it was live for everyone to hear. There were some who loved it, and then there were those who found themselves frustrated by the fact that the story failed to follow their plot design.

Study Group Results & Conclusions

As the study groups continued, I found attendance paralleled that of the standard schedule of a school semester.⁵⁰ Attendance trends rose and fell with mid-terms, Spring Break, and finals. On days where I had guest speakers come on and talk about their experiences, attendance would peak.

Over the course of nine streams I had four guest speakers: Bozz99, LunarDiamonds, bobrosstimelord, and FoodTubeLeigh.⁵¹ Bozz99 spoke about his experiences as a dyslexic student in London and the differences between schools that were prepared to work with dyslexics and schools that weren't. LunarDiamonds performed a poem she had written and shared her experiences as an Australian single mother and trying to still find her poetic voice. Bobrosstimelord was a licensed teacher in Pittsburgh and after being failed by the educational system moved from the US to Korea to Scotland where he got his PhD in Psychotherapy. Last

⁵⁰ For more information, see Appendix A: Tables/Figures

⁵¹ Guest speakers would join a specific Discord voice chat which would then be shared over the audio of the stream. As the speakers were volunteers from the Twitch community they are referred to by their usernames.

but not least, FoodTubeLeigh shared his experiences as a person diagnosed with ADHD and Asperger's kicked out of the Jewish private school in Manchester that was ill-equipped to handle individuals with autism. The sheer scope of these speakers illustrates how diverse of an audience an endeavor like this can draw.

Some viewers came to the stream to ask for help and were active in the chat. On the other hand, some viewers came to lurk, to merely have the stream on as background noise while they worked on other activities. Viewers came from countries like Israel, Germany, Finland, Australia, and more.⁵² A viewer from a game development university in Belgium was the reason for the format of the current Discord.⁵³ I implemented a form for viewers to leave reviews of their visits to the stream and make suggestions of how to improve their experience in the future.⁵⁴ In these ways I sought to customize the stream structures to better fit those who participated in them. As I brought in new ideas and used suggestions, viewers began to feel a sense of ownership in the study group, leading to more fulfilling study group experiences.

If these practices were to be incorporated in an institution of higher education they would best fit in student-lead, teacher-guided contexts like Writing Centers or subject-specific learning spaces. The Twitch Study Groups are not meant as replacements for the more traditional learning spaces, but supplementary tools meant to enrich the blended learning experience. If this format were to be used on a larger scale, similarly to the Discord group in

⁵² For a complete list of participating countries and ratios of their attendance, see Figure 8 in Appendix A: Tables/Figures.

⁵³ Discord categories were separated by their area of study and then sub-divided further by common classes. For instance, under the category Engineering there was a chatroom dedicated to rocketry. Currently, there is an entirely student-lead Discord group at a university in Belgium created for students to share knowledge and study tips/tricks per class.

⁵⁴ For more information about the responses to this form, see Figure 9 in Appendix A: Tables/Figures.

Belgium, this is still a distinct possibility as Discord and Twitch are expense-less: they require no monetary contribution.

When applying unconventional methods to a subject such as writing studies, it increases the intrigue of the study in question. Twitch is something that is current and new *right now* and it allows us to fully explore and reinterpret those Adler-Kassner's Threshold Concepts from new technological angles. It has a base usership substantial enough to warrant its consideration in the world of academia and we would be handicapping ourselves if we ignore this educational opportunity.⁵⁵

Areas for Further Study

This study targeted writing studies and how to best enrich them through implementation of social media. Although similar studies have been conducted around other social media (i.e. Twitter and blogging), as of this moment the use of Twitch as an educational platform has yet to be fully explored. Future researchers may consider a comparative study using Twitch in conjunction with an institution whereas the context of this study was conducted from my personal home office. Furthermore, I believe increasing incentive (outside of being a part of a learning-focused community) would benefit further research.

⁵⁵ Bobrosstimelord clicked on the stream because he was intrigued by the title and the fact that "someone cared about education on Twitch." Other streamers were directing viewers to the Study Group because they were saying things like, "I should be doing my homework, but instead I'm here."

Bibliography

- _____. "About." Twitch.tv. Accessed March 31, 2019. <https://www.twitch.tv/p/about/>.
- Adler-Kassner, Linda, and Elizabeth Wardle, editors. *Naming What We Know: Threshold Concepts of Writing Studies*. (Utah State University Press, 2015).
- Anderson, Kelli. "Game-Based Learning Is Changing How We Teach. Here's Why." EdSurge. February 14, 2019. Accessed March 31, 2019. <https://www.edsurge.com/news/2019-02-04-game-based-learning-is-changing-how-we-teach-here-s-why>.
- Anson, Chris M. "Habituated Practice Can Lead To Entrenchment." *Naming What We Know: Threshold Concepts of Writing Studies*, edited by Linda Adler-Kassner and Elizabeth Wardle, (University Press of Colorado, 2005): 77-78.
- Ball, Cheryl E, and Colin Charlton. "All Writing Is Multimodal." *Naming What We Know: Threshold Concepts of Writing Studies*, ed. Linda Adler-Kassner and Elizabeth Wardle. (University Press of Colorado, 2005): 42-43.
- English, James F. *The Global Future of English Studies*. (Wiley-Blackwell, 2012).
- Lee, Alicia Y, and Laura J Handsfield. "Code-Meshing and Writing Instruction in Multilingual Classrooms." *The Reading Teacher* 72, no. 2 (2018): 159-168. literacyworldwide.org.
- Menkhoff, Thomas, Yue Wah Chay, Magnus Lars Bengtsson, C. Jason Woodard, and Benjamin Gan. "Incorporating Microblogging ("tweeting") in Higher Education: Lessons Learnt in a Knowledge Management Course." *Computers In Human Behavior* 51 (December 16, 2014): 1295-302. www.elsevier.com/locate/comphumbeh.
- Price, Jonathan, and Lisa Price. *Hot Text: Web Writing That Works*. (New Riders, 2002).
- Rosalia, Christine. "So You Want to Start a Peer Online Writing Center?" *Studies in Self-Access Learning Journal* 4, no. 1 (March 2013): 17-42. <http://sisaljournal.org/archives/mar13/rosalia>.
- Roozen, Kevin. "Writing Is a Social and Rhetorical Activity." *Naming What We Know: Threshold Concepts of Writing Studies*, edited by Linda Adler-Kassner and Elizabeth Wardle, (University Press of Colorado, 2005): 17-19.
- Silver, Stephen, and Mike Wuerthele. "Apple and Education: Four Decades of Highs and Lows." Apple Insider. March 26, 2018. Accessed January 5, 2019. <https://appleinsider.com/articles/18/03/26/apple-and-education-four-decades-of-highs-and-lows>.

Smith, Craig. "55 Amazing Twitch Stats and Facts (2019) | By The Numbers." DMR. March 29, 2019. Accessed March 30, 2019. <https://expandedramblings.com/index.php/twitch-stats/>.

Stephenson, Brad. "Twitch: Everything You Need to Know." *Lifewire*, (December 17, 2018), www.lifewire.com/what-is-twitch-4143337.

Stock, Patricia L. "Writing Across the Curriculum." *Theory Into Practice*, vol. 25, (Taylor & Francis, Ltd. 1986): 97–101. Building Literacy.

Appendix A: Tables/Figures

Figure 5: Average Study Group Wednesday Viewers

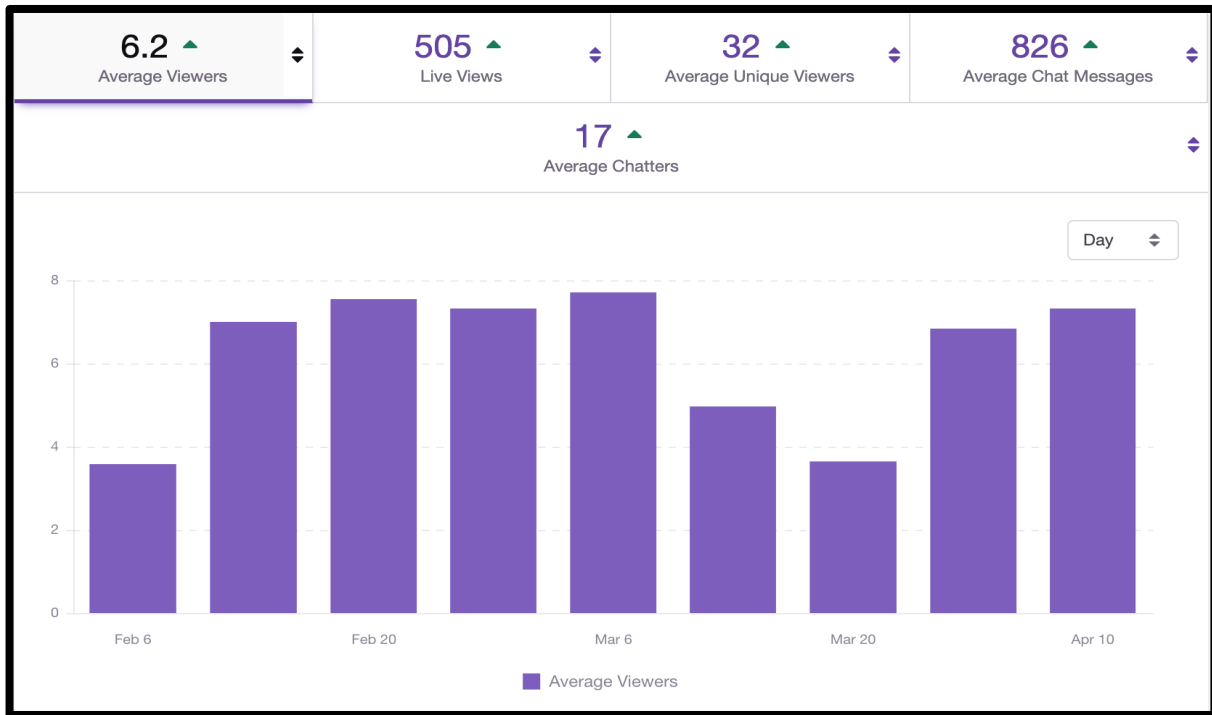


Figure 5: Attendance trends parallel the school year schedule: attendance increases up to mid-terms then dips significantly during Spring Break. Graph and statistics courtesy of Twitch.tv.

Figure 6: Study Groups 1 & 2 Average Viewers

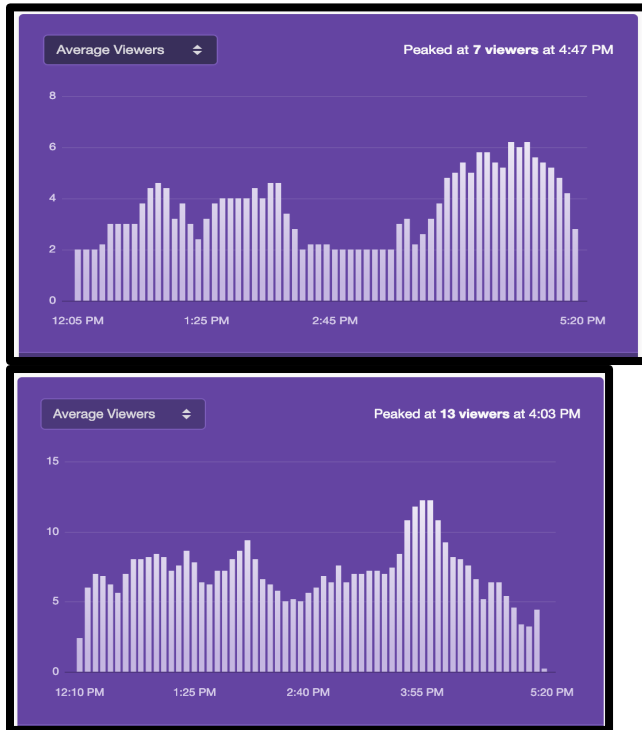


Figure 6: Graph shows viewer peaks and recessions in line with time zone differentiations and when viewers get home from work/school in the U.S. and Europe. Between the two streams, the average viewership doubled displaying a significant increase in interest and participation. Graph courtesy of Twitch.tv.

Figure 7: Study Groups 1 & 2 Average Chat Messages

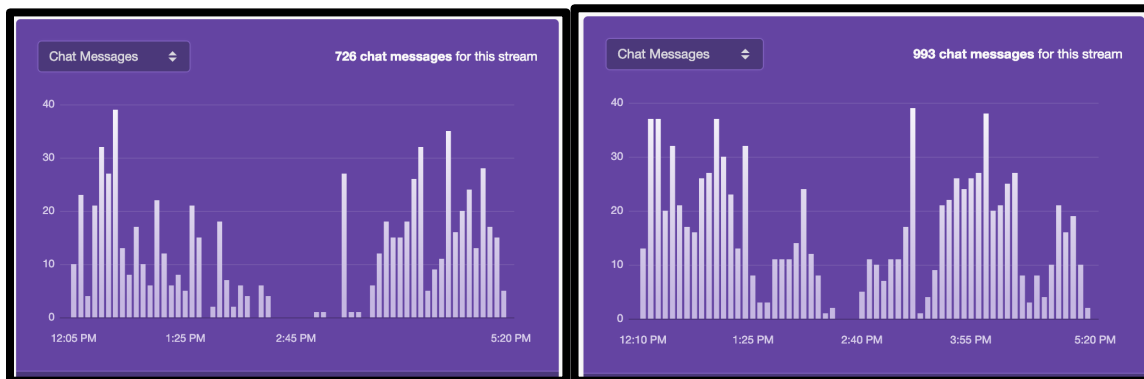


Figure 7: Chat message trends follow trends of average viewers. Graph courtesy of Twitch.tv.

Figure 8: Location of Unique Viewers Broken Down by Percentage of Viewers

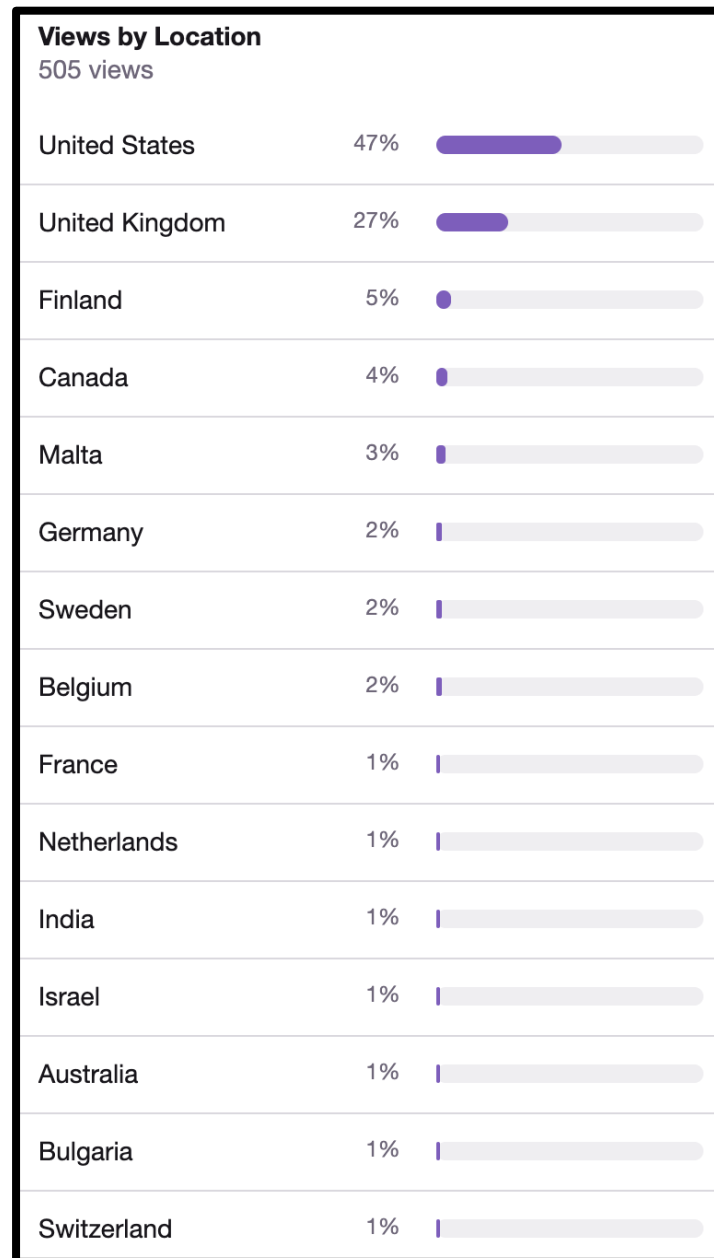


Figure 8: Of the 505 unique viewers, the majority were from the United States and United Kingdom. With that in mind, SGs still drew viewers from 15 different countries around the world.

Figure 9: Study Group Form Responses to Why They Found That Day's Study Group To Be Helpful

Questions brought up were answered nicely. Healthy debates were formed.
I was able to ask questions that are related to my education and receive answers not only from Devan, but from the community who attended the stream as well.
We were able to help plenty of people who were struggling and helped them complete their problems
I understood my math a lot better than what my teacher had explained and Butter & Sonic used better words that made the connection for me! :)
It creates a very different atmosphere. One that kind of feels more relaxing but focused on positive self-improvement. Love it.
n/a
The range of topics discussed is useful to make people more well rounded. Also the sheer appetite for intelligent discussion with everyone is awesome.
Got to read my poem.. got support and great feedback

Figure 9: It is important to note the responses provided are in response to the previous question: "Did you find today's Study Group to be helpful?" The responses to this were 100% "Yes". Data courtesy of Google Forms. Notice, the third response directly mentions two volunteer tutors Sonicwave_ and ButterMonkeyFTW.

Appendix B: Chain Story Activity

Below are the rules and initial entries done by viewers for the “Chain Story Activity”, later titled “Fallen Worlds”. It is important to understand the target audience of the rules below is anywhere between 13-40 years old. Moreover, the language used to convey the rules is extremely casual and therefore may contain colloquialisms of Twitch and general internet culture.

Rules:

1. **Have fun! :D**
2. No judging others’ writing abilities. This is no place for the grammar police.
3. Stick to the genre theme.
4. You get to write one-two paragraphs, but if your idea takes longer, feel free to go to three or four. If you do dialogue instead, no more than a page. You cannot take more than a day to write your section.
5. Don’t be afraid to get creative. The only limit is the genre. Everything else is up to you.⁵⁶
6. Avoid any language that wouldn’t be allowed in a TheHotdish stream.⁵⁷
7. No bob, this can’t turn into an erotic novel.⁵⁸ But it can be *suggestive*.
8. Place your name at the beginning of your paragraph.
9. **Have more fun.**

Genre: Space Fantasy

Parameters: No light sabers ;)

ButterMonkeyFTW:

As all worlds end, darkness descended on Earth’s cities. Militaries crumbled as they attempted to maintain order. Democracy turned to anarchy.⁵⁹

This was in the year 2053. Earth had finally succumbed to its inevitable demise. As many human civilizations crumbled, the fittest were the ones to take lead and bring humans to the stars.

In the year 2153, one hundred years after the initial cataclysm, the leading power in the world commissioned the SSC Convergence, symbolizing the human race’s convergence to space nomads. Taking 3 years to complete, using nearly all of the Society’s Sanctuary Coalition’s resources, it would be the largest endeavour that the

⁵⁶ This rule was established to encourage a sense of “play” in the writers participating.

⁵⁷ “TheHotdish” is my personal alternate Twitch account which is more video-game focused. I created a secondary account for SG so as to not sway the collected data.

⁵⁸ This is in reference to bobrosstielord, a moderator of the Study Group streams and participant in the activity.

⁵⁹ Each writer was allowed to choose their own font and font-size.

human race has set upon. Once complete, the leader of SSC, Ferdinand Rodrickson, would pilot the craft into deep space where they would seek to meet alien life and use the Convergence as a port for all human civilization that sprouts from these pioneers.

~~~<sup>60</sup>

## TheHotdish

Ferdinand awoke to the sound of water dripping from the roof. Today was the day. Counting the seconds between each droplet, he methodically went through his morning routine. Drip. *Ok, Ferds.* Drip. *Inhale.* Drip. *Exhale.* Drip. *Open your eyes.* Eyelids peeling back, he took in the cramped room around him, a single bulb illuminated the disarray strewn across the floor. It's incredible how many used corndog sticks you can find when you're trying to fit your entire life into one bag.

Ferdinand swung his legs over the side of his bed, the mattress had already been stripped in preparation for his departure and made a sad creaking noise as he stood. He took a moment to take in the time, *3:00am, perfect.* He still had several more hours before he was required to show up for what would be his final mission debrief before he left for what would be an extended tour beyond the outskirts of the small stretch of space humanity had claimed as their own for the past hundred years. *Well, he thought, civilization's most advanced space travel vehicle isn't going to drive himself.* Standing up, Ferdinand takes one last look around the picked-apart room, picks up the small duffle bag near the door, and exits his former home for the last time.

*Let's find somewhere to kill some time.*

~~~

bobrosstimelord

Ferdinand made sure to close the door slowly with a soft click. A satisfying noise, there was a sense of pride behind the success as he grinned ear to ear. For years he always internally chastised his neighbours for their lack of awareness that they all had to live within earshot of each other. Residing in a thin-walled, tiny apartment had benefits while evading unwanted social interaction personally addressed to him, but did little to secrete away his cohabitants' comings and goings.

He casually turned to take one last look at the door opposite him. *I wonder if Mrs. T is home?* The crazy old bat always interfered in his self-imposed solitude but she wasn't all that bad. With a semi-silent laugh at a memory of the woman yelling at him to take better care of himself, he stepped toward her door. Ferdinand had big plans that involved boundless stars and galaxies

⁶⁰ The "~~~" was meant to signify to the next writer that the current writer was finished.

and his talent as a starship pilot was going to get him there. Quietly, Ferdinand reached into the duffle bag and pulled out a small envelope before sliding it under her door. *See you 'round, Mrs. T.* Pulling up the hood of his dark jacket, he slipped from the cover of the awning and into the early morning fog from last night's rain.

~~~

### **Minnesota\_To**

As Ferdinand walked through the fog he saw a shadow following him. Being the most important pilot to ever exist he knew he had to be careful, many people wanted him dead, his life is always at risk.

"Ferdinand" screamed a shrill, oddly robotic voice.

Slowly he turned around, ready to protect himself as he has done many times before, his face suddenly dropped in a state of shock. A now ripped, bionic Mrs. T was facing him, metal legs and machine guns for arms. A super spy assassin under the guise of a weak old woman! Ferdinand laughed to himself, "how did I never see her machine gun arms hahaha".

She rushed forward blasting bullets with every step. Ferdinand channeled his inner energy and phase shifted around the bullets before unleashing a barrage of punches, each perfectly targeted to rip the gun arms from Mrs. T's body. With a shrill scream she instantly grew two giant mallet arms and with a crushing blow slammed them against Ferdinands head, this only made him angry.

Screaming, Ferdinand powers up converting anger into pure energy. A guy that got woken up by the battle shouts out of a window "can you not," he is instantly chopped in half by the sheer power of sound waves emanating from a now glowing Ferdinand. Mrs. T, unfazed for she is mostly robot, charges up a final mallet strike, whipping around at mach 3 she crushes her arm into Ferdinands face creating a devastating explosion, massacring everything within 100 meters of the impact. Orchestral music begins playing in the background of the fight as the dust settles. Ferdinand, glowing pink and floating, grabs Mrs. T around the neck and slams the bionic old woman into the ground instantly killing her, her mangled body writing on the ground as latent energy escapes her corpse. "These people need to try a bit harder" Ferdinand jokes.

A bloody Ferdinand walks away from the body of Mrs. T. "Wow, I still have a hour to spare! I'm going to find a Ramen shop before heading to the mission briefing."

~~~